CLAIM AMENDMENTS

Claim 1-5 (cancelled).

Claim 6 (currently amended):

A miter saw comprising:

a base assembly defining a cutting zone and configured to support workpieces in the cutting zone;

a pivot arm coupled to the base assembly and selectively moveable toward and away from the cutting zone;

a tilt mechanism between the base assembly and the pivot arm, where the tilt mechanism is configured so that the pivot arm may tilt relative to the base assembly;

a motor assembly;

a rotatable arbor supported by the pivot arm and driven by the motor assembly;

a rotatable blade mounted on the arbor and configured to cut workpieces supported within the cutting zone;

a detection system configured to detect one or more dangerous conditions between a person and the blade; and

a reaction system configured to stop movement of the pivot arm toward the base assembly upon detection by the detection system of the one or more dangerous conditions, ~~The miter saw of claim 5,~~ where the reaction system comprises a brace member and a locking assembly; where the brace member is coupled to the tilt mechanism and the locking

assembly; where the locking assembly is coupled to the pivot arm; and where the locking assembly is configured to lock onto the brace member to prevent the pivot arm from moving toward the base assembly when the detection system detects the one or more dangerous conditions between a person and the blade.

Claim 7 (original):

The miter saw of claim 6, where the reaction system further comprises a positioning mechanism associated with the brace member and locking assembly and configured to reduce any play in the brace member and locking assembly.

Claim 8 (original):

The miter saw of claim 7, where the positioning mechanism comprises a spring.

Claim 9 (original):

The miter saw of claim 6, where the brace member is slidably coupled to the locking assembly, and where the locking assembly comprises a gripping mechanism configured to selectively engage and grip the brace member.

Claim 10 (original):

The miter saw of claim 9, where the gripping mechanism comprises a clamping device; and where the locking assembly further comprises a biasing mechanism configured to urge the clamping device to a locked position, and a restraining mechanism configured to maintain the clamping device in a nominal position until the detection system detects the one or more dangerous conditions.

Claim 11 (original):

The miter saw of claim 10, where the restraining mechanism comprises a fusible member.

Claim 12 (currently amended):

A miter saw comprising:

a base assembly defining a cutting zone and configured to support workpieces in the cutting zone;

a pivot arm coupled to the base assembly and selectively moveable toward and away from the cutting zone;

a motor assembly;

a rotatable arbor supported by the pivot arm and driven by the motor assembly;

a rotatable blade mounted on the arbor and configured to cut workpieces supported within the cutting zone;

a detection system configured to detect one or more dangerous conditions between a person and the blade; and

a reaction system configured to stop movement of the pivot arm toward the base assembly upon detection by the detection system of the one or more dangerous conditions, ~~The miter saw of claim 1,~~ where the reaction system comprises a brace member and a locking assembly; where the brace member is coupled to the base assembly and the locking assembly; where the locking assembly is coupled to the pivot arm; and where the locking assembly is configured to lock onto the brace member to prevent the pivot arm from moving toward the base assembly when the detection system detects the one or more dangerous conditions between a person and the blade.

Claim 13 (original):

The miter saw of claim 12, where the brace member is slidably coupled to the locking assembly, and where the locking assembly comprises a gripping mechanism configured to selectively engage and grip the brace member.

Claim 14 (original):

The miter saw of claim 13, where the gripping mechanism comprises a clamping device; and where the locking assembly further comprises a biasing mechanism configured to urge the clamping device to a locked position, and a restraining mechanism configured to maintain the clamping device in a nominal position until the detection system detects the one or more dangerous conditions.

Claim 15 (original):

The miter saw of claim 14, where the restraining mechanism comprises a fusible member.

Claims 16-18 (cancelled).

Claim 19 (new):

A miter saw comprising:

a base assembly defining a cutting zone and configured to support workpieces in the cutting zone;

a pivot arm coupled to the base assembly and selectively moveable toward and away from the cutting zone;

a tilt mechanism between the base assembly and the pivot arm, where the tilt mechanism is configured so that the pivot arm may tilt relative to the base assembly;

a motor assembly;

a rotatable arbor supported by the pivot arm and driven by the motor assembly;

a rotatable blade mounted on the arbor and configured to cut workpieces supported within the cutting zone;

a detection system configured to detect one or more dangerous conditions between a person and the blade; and

reaction means for stopping movement of the pivot arm toward the base assembly upon detection by the detection system of the one or more dangerous conditions, where the reaction means comprises a brace

member and locking means for preventing the pivot arm from moving toward the base assembly when the detection system detects the one or more dangerous conditions between a person and the blade; where the brace member is coupled to the tilt mechanism and the locking means; and where the locking means is coupled to the pivot arm.

Claim 20 (new):

A miter saw comprising:

a base assembly defining a cutting zone and configured to support workpieces in the cutting zone;

a pivot arm coupled to the base assembly and selectively moveable toward and away from the cutting zone;

a motor assembly;

a rotatable arbor supported by the pivot arm and driven by the motor assembly;

a rotatable blade mounted on the arbor and configured to cut workpieces supported within the cutting zone;

a detection system configured to detect one or more dangerous conditions between a person and the blade; and

reaction means for stopping movement of the pivot arm toward the base assembly upon detection by the detection system of the one or more dangerous conditions, where the reaction means comprises a brace member and locking means for preventing the pivot arm from moving toward the base assembly when the detection system detects the one or

more dangerous conditions between a person and the blade; where the brace member is coupled to the base assembly and the locking means; and where the locking means is coupled to the pivot arm.